

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
BUREAU OF LAND MANAGEMENT

N.M. OIL CONS. COMMISSION  
DO NOT WRITE IN THESE SPACES  
ARTESIA, NM 88210

FORM APPROVED  
Budget Bureau No. 1004-0135  
Expires: March 31, 1993

**SUNDRY NOTICES AND REPORTS ON WELLS**

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.  
Use "APPLICATION FOR PERMIT—" for such proposals

**SUBMIT IN TRIPLICATE**

RECEIVED

SEP 27 1993

1. Type of Well

☒ Oil Well ☐ Gas Well ☐ Other

2. Name of Operator

Marathon Oil Company

3. Address and Telephone No.

P.O. Box 552 Midland, Tx. 79702

(915) 682-1626

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

1650' fsl & 1650' fwl  
SEC. 28, T-21-S, R-24-E

7. If Unit or CA, Agreement Designation  
INDIAN HILLS

8. Well Name and No.  
INDIAN HILLS UNIT #4

9. API Well No.  
30-015-10738

10. Field and Pool, or Exploratory Area  
INDIAN BASIN (U.PENN)

11. County or Parish, State  
EDDY, NEW MEXICO

12. CHECK APPROPRIATE BOX(S) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION

- ☒ Notice of Intent  
☐ Subsequent Report  
☐ Final Abandonment Notice

TYPE OF ACTION

- ☐ Abandonment  
☒ Recompletion  
☐ Plugging Back  
☐ Casing Repair  
☐ Altering Casing  
☐ Other \_\_\_\_\_
- ☐ Change of Plans  
☐ New Construction  
☐ Non-Routine Fracturing  
☐ Water Shut-Off  
☐ Conversion to Injection  
☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)  
MARATHON PROPOSES TO DEEPEN THE ABOVE REFERENCED WELL TO +/- 8000'. PLEASE SEE THE ATTACHED RECOMPLETION PROCEDURE FOR SPECIFIC DETAILS. WORK IS EXPECTED TO BEGIN AS SOON AS POSSIBLE. THE DURATION OF THE RECOMPLETION IS ANTICIPATED TO BE 14 DAYS.

THE FOLLOWING PROCEDURE WAS DISCUSSED WITH AND APPROVED BY ADAM SALAMEH ON AUGUST 31, 1993.

RECEIVED  
SEP 2 11 34 AM '93  
CABLE AREA  
FORS

14. I hereby certify that the foregoing is true and correct

Signed D.W. PEARCE

Title DRILLING SUPERINTENDENT

Date 8/31-93

(This space for Federal or State office use)

Approved by (ORIG. SGD.) JOE G. LARA

Title PETROLEUM ENGINEER

Date 9/23/93

Conditions of approval, if any:

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

\*See Instruction on Reverse Side

INDIAN BASIN (UPPER PENN)  
INDIAN HILLS UNIT NO. 4  
1650' FSL & 1650' FWL  
SECTION 28, T-21S, R-24E  
EDDY COUNTY, NEW MEXICO

TD: 7500' PBTD: 7483'

GL: 3781' KB: 3799'

STATUS: TA'D (6/21/76)

SURFACE: 13-3/8" 48# SET @ 218', CEMENTED W/  
250sx INCOR 2% GEL W/1/4# FLOCELE.  
CEMENT CIRC TO SURFACE.

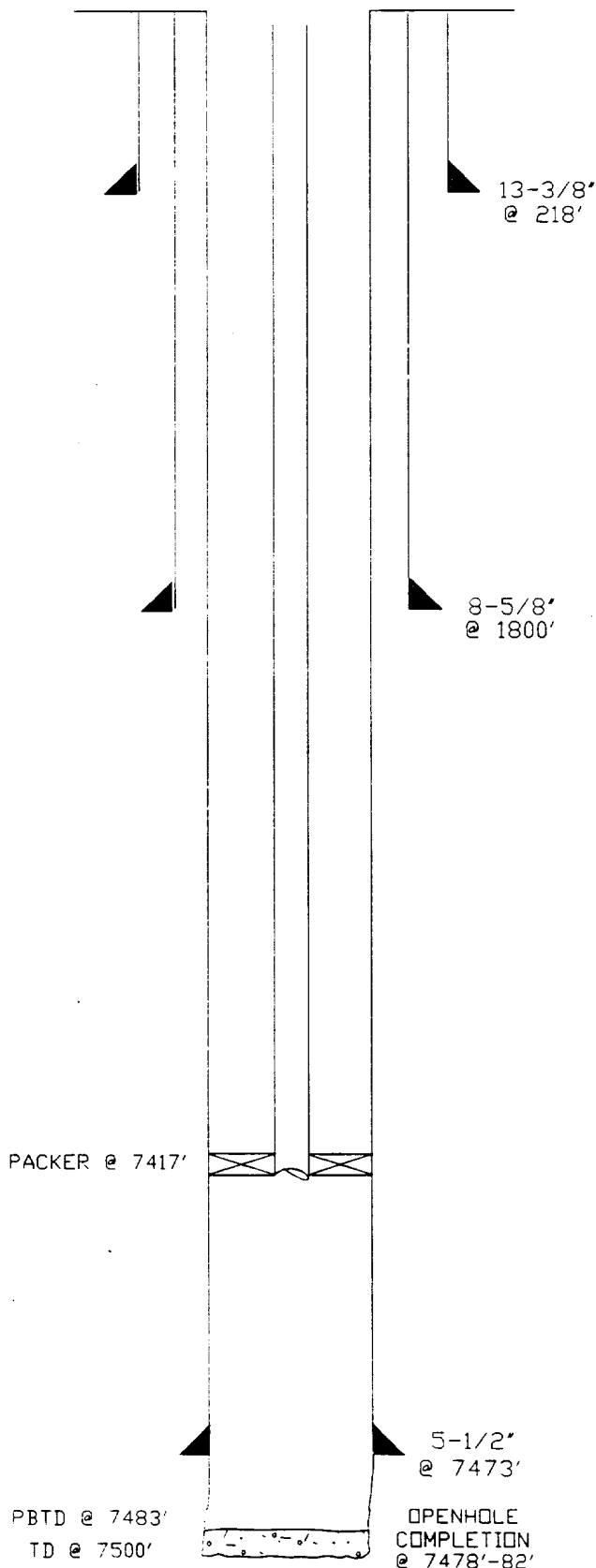
INTERMEDIATE: 8-5/8" 24# J-55 SET @ 1800',  
CEMENTED W/600sx 50/50 POZ W/  
12% GEL & 1/4# FLOCELE. TAILED  
W/950sx 50/50 POZ W/4% GEL &  
1/4# FLOCELE. FOLLOWED W/100sx  
INCOR NEAT CEMENT. CIRCULATED  
TO SURFACE. FELL BACK TO 230'.  
CEMENTED W/100sx NEAT CEMENT  
THRU 1' BACK TO SURFACE.

PRODUCTION: 5-1/2 15.5#/17# SET @ 7473' CEMENTED  
W/200sx INCOR 4% GEL 1/4# FLOCELE  
AND TAIL W/100sx REGULAR NEAT. TOP  
OF CEMENT @ 5700'.

TUBING & PACKER: 5-1/2" TIW PACKER, (7417' W/  
10,000#) GUIBERSON HOLDDOWN,  
SN & 234 JTS 2-3/8" 4.7# J-55  
8rd TUBING.

PRESENT COMPLETION: UPPER PENN OPEN HOLE  
7478'-82' W/2 SPF.

PREVIOUS COMPLETION: (UPPER PENN) OPENHOLE  
7473'-7500'.



HISTORY: SPUDDED 11/16/65, COMPLETED 12/14/65. RAN 2-3/8" 4.7# J-55 TUBING W/PACKER TO 7351'. COMPLETED 2/69  
(600 BBLs/MMCF) WELL OPENHOLE @ 7500' WELL TESTED 16 MMCF W/1100# FTP. TREATED W/500 GAL MUD ACID & 500  
GAL DS-50 15% HCL ACID. MOC TOOK OVER AS OPERATOR 3/23/66. (8/27/70) KILLED WELL. RAN CIRC TO 7466'.  
SQUEEZED OPENHOLE FROM 7473' TO 7500' W/350sx CF CEMENT. REVERSED OUT 90sx. DRILLED OUT CEMENT FROM 7466'  
TO 7483'. PERFORATED OPENHOLE FROM 7478'-82' W/2 SPF 5' (10 HOLES). SWABBED WELL IN AND TESTED (177 MCF,  
80 BW & 2 BC) 10/30/70. SHUT-IN (6/21/76) TA'D WELL. RNM/RWW 6/93

# RECOMPLETION PROCEDURE

INDIAN HILLS UNIT NO. 4  
Station 128  
Indian Basin Field  
1650' FSL & 1650' FWL  
Section 28, T-21-S, R-24-E  
Eddy County, New Mexico

Date: July 2, 1993

AFE No.:

Purpose: Recomplete to Upper Penn Oil Zone

Elevation: 3781' GL 3799' KB

TD: 7500' PBTD: 7483'

Surface Casing: 8-5/8", 24#, J-55 @ 1800' w/700 sx  
Used 1" pipe and 100 sx to bring cmt  
to surface.

Production Casing: 5-1/2", 17#/15.5#, J-55 @ 7473'  
Cemented w/300 sx. TOC 7500' by TS.

Drilling Mud Weight: 9.5 ppg cut brine, 34 VIS 20 cc W.L.

Estimated SBHP: 2000 psig

Safety Considerations: Hold daily safety meeting explaining the  
proposed procedure.

1. Inspect and clean location.
2. Install and test safety anchors to 22,500 lbs.
3. MIRU PU. Kill well w/2% KCl. Nipple down wellhead. Install 900 series BOPs with 2-7/8" pipe rams and test to 2500 psig.
4. Hook up to backside. Pressure test casing and packer to 500 psig. Release pressure. Unset packer and POOH.
5. RU reverse unit and power swivel. Pick up 4-3/4" bit, drill collars on 2-7/8", N-80 workstring. RU mud loggers. Drill out PBTD and deepen well 500' to approximately 8000'. RD mud loggers. POOH w/workstring, drillcollars and bit. RIH w/7" underreamer and drill collars. Underream open hole section from casing shoe to TD. Circulate hole clean. POOH. RD reverse unit.
6. RU logging company. Install full lubricator and test to 2500 psig. Run compensated Neutron and Density log. Run Dual Laterlog and Sonic logs in the open hole section. RD logging company.
7. . . . RIH w/700' of 4-1/2" flush joint casing. . . . RIH w/liner to TD. Cement liner w/the attached service company recommendation.
8. RIH w/2-7/8" workstring and tag PBTD. Pressure test casing and liner to 1000 psig. Spot 400 gals of 20% HCl acid across zone to be perforated. POOH.
9. RU logging company. Install full lubricator and test to 1500 psig. Run GR-RAL and GR-CBL-CCL from PBTD to top of liner. (Run repeat section with 0 psig on casing and main pass with 1000 psig on casing.) RD logging company.
10. PU Vann Gun assembly to perforate Upper Penn interval (a complete diagram of the assembly is attached) and Model K

firing head, pressure operated vent, 4-1/2" retrievable packer, and 6' RA sub. Test workstring and connections to 8000 psi while running in hole. (Workstring will be run dry.)

11. RU wireline company. Space out gun assembly and packer by using GR to correlate to the openhole logs. Locate RA sub and position packer accordingly. Do not run GR tool 10' below packer. POOH with wireline. RD wireline company.
12. Set packer and remove BOPs. Install X-mas tree. Install pop off valve set at 1500 psi and 2000 psi rupture disc on opposing sides of annulus.
13. RU stimulation company. Rig up surface equipment and test all lines. Pressure annulus to 1000 psi. Spot 1000 gals 20% HCl inside tubing. Pressure up w/N<sub>2</sub> to 7000 psig to open pressure operated vent. Once pressure operated vent open, continue to pressure up on tubing to fire Vann Gun set at 8000 psig.
14. As soon as pressure drop detected, put away acid with N<sub>2</sub>. Flush acid to bottom perf with N<sub>2</sub>.
15. Immediately open well and flowback to pit at maximum flow rate.
16. RU swab. Swab well to evaluate reservoir. Report results to Midland Operations.
17. Place well on submersible pump to gain an accurate test of production.

xc: R. J. Folse  
L. N. Hoover  
C. T. Pearce  
D. R. Petro  
R. W. Tracy  
R. W. Wardlow